DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



OBG side and bottom panels and tower skin p

Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 50.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-002815 Address: 333 Burma Road **Date Inspected:** 06-Jun-2008

City: Oakland, CA 94607

34-0006

Project Name: SAS Superstructure **OSM Arrival Time:** 1400 **OSM Departure Time:** 2300 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Jiangyin **Location:** Shanghai, China

CWI Name: Yes Chen Chih-Ming / An Qingxiang CWI Present: No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No

Yes No N/A **Delayed / Cancelled:**

Component:

Summary of Items Observed:

Bridge No:

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG new assembly bay 2

QA noted that ZPMC had completed SAW on SEG-022A-003 SP-601 to SP-561.

QA observed ZPMC qualified welding personnel perform FCAW root weld on SEG-021A-002 SP-091 to SP-118 following the guide lines of WPS# WPS-B-T-2131-B-U2-F-1. QC monitored the welding process continuously throughout the evening. The welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

Volts: 28 Amps: 257 Travel speed: 470mm/min

QA observed ZPMC qualified welding personnel perform SAW on SEG-023-012 SP-749 to SP-511 following the guide lines of WPS# WPS-B-T-2221-B-L2c-S-1. QC monitored the welding process continuously throughout the evening. The welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

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Volts: 30 Amps: 526 Travel speed: 653mm/min

QA observed ZPMC qualified welding personnel perform SAW on SEG-024A-006 SP-603 to SP-563 following the guide lines of WPS# WPS-B-T-2221-B-L2c-S-1. QC monitored the welding process continuously throughout the evening. The welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

Volts: 31 Amps: 531 Travel speed: 603mm/min

QA observed ZPMC qualified welding personnel back gouging joint SEG-021A-008 SP-747A to SP-509A. Other general observations include ZPMC personnel grinding side and bottom panels and weld bevel prep.

New Tower Bay 1

QA performed 10% Ultrasonic Testing (UT) verification on the following tower skin plate joints: SSD1-SA173K/K-9A, 11A, 12A and 13A, SSD1-SA178C/D-25B, 7B, 10B and 11B. All welds that were scanned appeared to compliant with AWS D1.5 2002 and the contract documents.

New Tower Bay 2

QA attempted to perform 10% UT on joint ESD1-SA107A/J-19 however, QA and QC could not locate the tower skin plate containing the above mentioned joint.





Summary of Conversations:

Only general conversations were held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Patrick Lowry (858)-344-2712, who represents the Office of Structural Materials for your project.

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Inspected By: Hall,Steven Quality Assurance Inspector

Reviewed By: Cuellar,Robert QA Reviewer